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Editorial

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Editorial

1 Dominic E. L. Ong

Senior Lecturer, School of Engineering and Built Environment, Griffith University, Queensland, Australia

2 Md Mizanur Rahman

Associate Professor in Geotechnical Engineering, University of South Australia, UniSA STEM, Australia

On behalf of the Editorial Board members, *Geotechnical Research* (GeoRes) welcomes readers to issue 3 of volume 8 (2021). GeoRes is the first gold Open Access (OA) journal of the Institution of Civil Engineers (ICE) focusing on geotechnical engineering. Similar to other open-access journals, an author is required to pay a publication charge as GeoRes maximises the impact of his/her publication(s) in a wide range of topics, as well as allowing an unlimited article length, which is often required for fundamental or applied research in geotechnical engineering. GeoRes also offers a range of discounts for disadvantaged researchers, particularly those from the International Network for the Availability of Scientific Publications (INASP) countries. Such discount opportunities aim to assist in the elimination of economic barriers for disseminating research output from developing countries.

The contributions from the fast-growing regions of Asia-Pacific, Africa and the Middle East as well as the mature regions of Europe and North America are very much acknowledged and appreciated. In the last few issues, GeoRes has published papers in the following key areas in geotechnical engineering: (i) innovative ground soil improvement work (Ciardi *et al.*, 2020; Feng *et al.*, 2020; Guo *et al.*, 2020; Weng *et al.*, 2020; Xie *et al.*, 2020), (ii) complex soil–structure interaction (Ge *et al.*, 2020; Inazumi *et al.*, 2021; Lopes and Dias, 2021; Shiau and Hassan, 2020; Xu *et al.*, 2020; Zhang, 2020) and (iii) reliable laboratory testing/model development (Feng and Liu, 2021; Li *et al.*, 2020; O’Kelly and Nogal, 2020; Osman *et al.*, 2020; Wang *et al.*, 2021).

It is worthwhile mentioning again that ICE Publishing has migrated the article-tracking system from Editorial Manager (EM) to a new platform called ReView. Even though the ReView system has been operational for at least 4 months now, occasional bugs have been reported, but they have been swiftly resolved to ensure a fulfilling user experience.

In the recent update of the SCImago Journal Rank (SJR) for the year 2020, GeoRes has achieved a commendable score of 0.652 to rank as a Q2 journal (SCImago Journal & Country Rank, 2021). Kudos to the dedication and hard work of our editorial

board members, reviewers and publisher as well as our esteemed authors for their valuable contributions. Let’s use this outcome as a motivation for us to scale greater heights with GeoRes in the coming years!

In this issue (3) of volume 8 (2021), two articles are published. The first article, by Ahenkorah *et al.* (2021), discusses how enzyme-induced carbonate precipitation (EICP), a variant biocementation technique, was used to improve soil strength. The maximum values reported for the unconfined compressive strength (UCS) and the splitting tensile strength (STS) are 2.82 MPa and 0.88 MPa, respectively. Micro-structural analyses by way of scanning electron microscopy images, energy-dispersive X-ray spectroscopy and X-ray powder diffraction showed that the precipitated calcium carbonate is mostly calcite crystals with different morphologies, possibly as a direct outcome of the level of purity of the used enzyme. The findings demonstrate that the concentration of chemical compositions in EICP is influenced by the activity of enzymes, thus having the potential to reduce the amount of undesirable by-products for the EICP process.

In the second paper, Qin and Ma (2021) perform centrifuge tests to study pile seismic behaviour arising from the change in the pile–raft embedment condition (from a low raft to a high raft due to soil consolidation over time), which affects the magnitude of the induced pile bending moment. To verify the centrifuge test results, numerical modelling using Abaqus software was also carried out. It is evident that the pile experienced greater bending moment accompanied by larger active depth under the high-raft case than the low-raft case due to the change in the ground level, which is capable of resisting lateral loads from seismic events. This observation reinforces the importance of considering post-construction consolidation settlement after pile installation.

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